*****ENFORCEMENT CONFIDENTIAL*****

CLEAN AIR ACT
Sinter Plant, Blast Furnaces, Boilers, Basic Oxygen Process Furnaces, Casters, Slab Furnaces, and Pickling Lines

MULTIMEDIA COMPLIANCE INVESTIGATION

UNITED STATES STEEL CORPORATION – GARY WORKS
GARY, INDIANA

Facility Address

U.S. Steel Corporation – Gary Works
One North Broadway
Gary, Indiana 46402

Investigation Dates

May 14, 15, 17, and 18, 2007

EPA Region 5 Inspectors

Brian Dickens, Environmental Engineer
Monica Onyszko, Environmental Engineer

SOURCE NAME AND LOCATION:

U.S. Steel – Gary Works in Gary, Indiana

DATE(S) OF INSPECTION:

May 14, 15, 17 and 18, 2007

PARTICIPANTS:

Dan Schaufelberger, EPA
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Mark Henry, U.S. Steel
Mark Happer, U.S. Steel
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Jim Wente, U.S. Steel
Don Ramsey, U.S. Steel
Micky Radovich, U.S. Steel
Raymond Rivas, IMS
Mike Perkins, Levy Indiana Slag Company

NEIGHBORHOOD DESCRIPTION:

The mill is located at the south end of Lake Michigan adjacent to other steel mills and other related industries.

OFF-SITE OBSERVATIONS OF PLANT:

The facility has many sources of fugitive emissions so some level of opacity and odor is always present while the facility is operating. (Reza's report states that "no visible emissions were observed as EPA inspectors gained entry to the plant." This makes it sound like there were no opacity problems. Did he mean that no one did method 11 readings or that there were actually no visible emissions? If the latter, is that contrary to Brian's report? If the former, then Reza needs to make that clearer.)

GENERAL PROCESS DESCRIPTION:

U.S. Steel operates an integrated steel mill. The Gary location includes a sinter plant, blast furnaces, basic oxygen process (BOP) furnaces [also called a blast oxygen furnace (BOF)], casters, slab furnaces, and pickling lines. The plant has approximately 5,000 employees that work in 8-hour shifts.

PURPOSE AND SCOPE OF INSPECTION:

The purpose of the inspection was to assist in determining compliance with the Clean Air Act (CAA). This inspection report summarizes operations at the boilers, sinter areas, blast furnaces, BOP furnaces, and finishing operations.

APPLICABLE RULES:

U.S. Steel has a Title V permit. This permit lists the applicable requirements for its operations. A summary of several significant provisions is below:

Blast Furnace:

Stoves –

State 6.8-2-38, PM10 pounds per million British Thermal Unit (lbs/MMBTU) limit and pounds per hour (lb/hour) limit and

State 7-4.1-20, sulfur dioxide (SO2) lb/MMBTU and lb/hr limit when coke oven desulfurization on/off.

Casthouse 4, 6, 8, 14 (4, 6, 8 fume suppression, 14 baghouse)- (why are these italicized?)

Suppression system must be in operation, furnaces 4, 6, 8;

Baghouse must be in operation, furnace 14;

Subpart 5F, 0.01 grain per dry standard cubic foot (gr/dscf), any opening 20% opacity, 6-minute average limit; and

Opacity 5-1-2, 20% opacity, 6-minute average limit (6.8-10 has BOF limits only).

Gas Distribution System -

All flares shall be in operation when all furnaces are in operation.

Slag Pit -

Opacity 5-1-2, 20% opacity, 6-minute average limit.

BOP Furnaces:

No. 1 BOP Shop (BOP vessels M, E and D) –

State 6.8-2-38, PM10 limit of 0.007 gr/dscf for Hot Metal Transfer and Desulfurization Station Baghouse, PM10 limit of 0.011 gr/dscf for Gas Cleaning System Stacks and PM10 limit of 0.0070 gr/dscf for CASBell/OB Lancing Baghouse Stack;

State 6.8-1-2(a), PM emission limit of 0.03 gr/dscf from roof monitors;

State 6.8-3-4, 5% opacity limit for any 3-minute average at Hot Metal Transfer and Desulfurization Station Baghouse, 20% opacity limit for any 3-minute average at Roof Monitor and 20% opacity limit for any 6-minute average at Gas Cleaning System Stacks;

EPA Administrative Consent Order (January 2, 2004), SO2 limit of 0.05 lb/ton of hot metal during hot metal processing at Nos. 1 and 2 Hot Metal Transfer and Desulfurization Stations Baghouse, SO2 limit of 0.01 lb/ton hot metal during hot metal desulfurization reagent injection; and

State 7-4.1-20(a)(1)(M) and (b)(11), SO2 emissions from the Nos. 1 and 2 Hot Metal Transfer and Desulfurization Stations Baghouse shall not exceed 0.05 lbs/ton of hot metal and 28.54 lbs/hour.

No. 2 Q-BOP Shop (Q-BOP vessels T, W and Y) –

State 6.8-2-38, PM10 limit of 0.007 gr/dscf for baghouse stacks and 0.0153 gr/dscf for the Gas Cleaning System Stack;

State 6.8-1-2(a), PM limit of 0.03 gr/dscf from roof monitors;

State 6.8-3-4, 5% opacity limit for any 3-minute average at Hot Metal Transfer and Desulfurization Stations Baghouse, North and South Flux Handling System Baghouse, Secondary Baghouse and Nos. 1 and 2 Hot Fume Exhaust Baghouse as well as 20% opacity limit for any 3-minute average at Gas Cleaning System Stack and Roof Monitor;

EPA Administrative Consent Order (January 2, 2004), SO2 limit of 0.05 lb/ton of hot metal during hot metal processing at Hot Metal Transfer and Desulfurization Stations Baghouse, SO2 limit of 0.01 lb/ton hot metal during hot metal desulfurization reagent injection;

State 7-4.1-20(a)(1)(L)and (b)(10), SO2 emission limit from the Hot Metal Transfer and Desulfurization Stations Baghouse shall not exceed 0.05 lbs/ton of hot metal and 28.54 lbs/hour; and

State 9-1-2(2), includes instructions for destruction of carbon monoxide (CO) and sets a maximum ground level concentration limit for a single source of 20% of the maximum ground one-hour Indiana ambient air quality value.

Boilers:

#4 Boilerhouse –

Boiler 1 and 2 – 500 MMBTU/hr, burning natural gas (NG), blast furnace gas (BFG), fuel oil;

Boiler 3 – 500 MMBTU/hr NG and BFG;

All Boilers:

State 6.8-2-38 for PM10 with 2 or 3 boilers running; and

State 7-4.1-20 for SO2 when coke oven desulfurization on/off.

Turboblower house -

Boiler 1, 2, 3 – 410 MMBTU/hr, BFG, coke oven gas (COG), NG, fuel oil (1948);

Boiler 4A – 244 MMTBU/hr, NG (1990), has Predictive Emissions Monitoring System (PEMS) for nitrogen oxide (NOx)

Subpart Db – NOx lb/MMBTU

Burn natural gas only;

Boiler 5 – 410 MMBTU/hr, BFG, COG, NG, fuel oil (1958);

Boiler 6 – 710 MMBTU/hr, BFG, NG (1972)

Subpart D, PM lb/mMMBTU and opacity

NOx limit of 0.14 lb/MMBTU;

All boilers:
State 6.8-2-38 for PM10 with 2 or 3 boilers running;
State 7-4.1-20 for SO2 when coke oven desulfurization on/off; and
Natural gas use limit..

Sinter Plant (3 strands):

Windbox (2 each with quench reactor, dry venturi scrubber and baghouse, volatile organic compound (VOC) continuous emission monitor (CEM) on each) -
Natural gas and COG usage limits for reheat burners;
Subpart 5F PM limit 0.4 lb/ton at windbox exhaust;
State 6.8-2-38 PM10 grains and lb/hr limits;
SO2 state rule 7-4.1-20, lb/hr limit for coke oven on/off;
VOC 2096 lb/day via state rule 8-13-3 (0.36 lb VOC/ton);
Subpart 5F 0.02% average oil content in feedstock; or
Subpart 5F 0.2 lb VOC emitted/ton sinter 30-day rolling.

Discharge End (baghouse on each) -
Subpart 5F, 20% opacity, 6-minute average limit;
Subpart 5F, PM 0.02 gr/dscf from control device; and
State 6.8-2-38 PM10 gr/dscf and lb/hr limits.

Cooler Stack -
Subpart 5F, 10% opacity, 6-minute average limit.

Miscellaneous Material Handling -
State 6.8-2-38 PM10 gr/dscf and lb/hr limits.

Finishing Operations:

84" Hot Rolling Mill –
State 6.8-2-38, PM10 emission limit of 0.017 lb/MMBtu and total of 40.80 lbs/hour for Furnaces Nos. 1, 2, 3 and 4;
State 6.8-2-38, PM10 emission limit of 0.043 lb/MMBtu and 10.0 lbs/hour from Waste Heat Boilers Nos. 1 and 2; and
State 7-4.1-20, variable SO2 emission limits for Reheat Furnace Nos. 1, 2, 3 and 4 dependent upon operation of the coke oven gas desulfurization unit;

84" Pickle Line (North Continuous Pickle Line) and
80" Pickle Line (South Continuous Pickle Line) -
NESHAP, Subpart CCC, does not allow for any gas discharge that contains hydrochloric acid (HCl) in a concentration in excess of 18 parts per million by volume (ppmv) or HCl at a mass emission rate that corresponds to a collection efficiency of less than 97% and
State 6.8-1-2(a), PM emission limit of 0.03 gr/dscf.

Sheet Mill (North and South Sheet Mills) -
State 6.8-2-38, PM10 emission limit from EGL Boiler House of 0.0033 lbs/MMBtu and total of 0.13 lbs/hour and
State 6.8-1-2(a), PM emission limit of 0.03 gr/dscf.

Tin Division -

State 6.8-1-2(a), PM emission limit of 0.03 gr/dscf from the 6-Stand Cold Reduction Mill Stack, Double Reduction Mill Stack and No. 1 Tin Free Steel Line Chemical Treatment Rinse Stack.

PROCESS DESCRIPTION:

See Section 1 (Process Overview) of the Introduction in Final Report Section of this compliance inspection report.

INSPECTION CONFERENCE:

The below topics were discussed.

May 14, 2007

After receiving identification cards, EPA arrived at the U.S. Steel office at approximately 9:15 A.M. and explained the nature of their visit. Mr. Mentzel of U.S. Steel lead an introduction to U.S. Steel environmental and management teams, provided process overviews, and headed a driving tour in the afternoon. Prior to leaving on the tour, plant safety procedures were discussed. EPA personnel also underwent a contractor orientation.

Iron

Mr. Dickens inquired about the #14 blast furnace project that U.S. Steel claimed increased emissions. U.S. Steel originally proposed to increase emissions above new source review (NSR) significant levels, but unfortunately couldn't secure the NOx offsets that would be necessary. U.S. Steel then took production limits to keep it from triggering PSD. Now that #3 coke oven has been removed from service, U.S. Steel has emission credits and is attempting to permit a level of production that exceeds those limits already set by IDEM to avoid NSR.

Mr. Alexander remembered testing at the slag pits to quantify SO2 emissions, but not hydrogen sulfide emissions.

In approximately 1999, Turboblower boilers 1, 2, 3, 5, and 6 all got new controls and burners to burn more blast furnace gas and less natural gas. The #6 boiler triggered NSPS, Subpart D, because its burners allowed the burning of more natural gas.

In approximately 2001, U.S. Steel added a coke oven gas burner to preheat the sinter plant vent before it enters the dry scrubber.

U.S. Steel installed SO2 controls (quench reactor and dry venturi scrubber) as a supplemental environmental project (SEP) in 1996 in response to an IDEM Findings and Orders.

In 1993, U.S. Steel installed the pulverized coal injection project. As part of the project the composition of the flux added to the furnace changed; therefore, there was not necessarily more slag produced after the project.

Steel

U.S. Steel provided EPA with descriptions of its steel-making equipment. No. 1 BOP Shop has three top-blown vessels, M, E, and D, which are equipped with oxygen lances. No. 2 Q-BOP Shop has three bottom-blown vessels, T, W, and Y, which are each equipped with two oxygen lines as well as a nitrogen and natural gas line used for cooling purposes. When a heat is tapped, it is transported to one of four slab casters. There are three ladle metallurgical facilities that are used to further refine properties of the steel. In both shops, two of the three vessels can be run at the same time, but all three cannot be run concurrently.

Both BOP Shops have primary and secondary gas cleaning systems that treat emissions from the respective three vessels. For both the No. 1 BOP Shop and No. 2 Q-BOP Shop, the primary system consists of venturi scrubbers and the secondary system is a baghouse. Uncontrolled emissions exhaust through roof monitors. U.S. Steel explained that the BOP Shop and Q-BOP Shop roof monitors are read more than three times per week in accordance with the Visible Emission Evaluation Plan.

Both BOP Shops also have Hot Metal Transfer and Desulfurization Stations. Emissions are ducted to the respective baghouses.

May 15, 2007

EPA arrived at U.S. Steel at approximately 9:00 A.M. In the morning, U.S. Steel trained EPA about carbon monoxide exposure at the blast furnaces. EPA personnel were provided with personal carbon monoxide monitors.

Iron

Mr. Dickens asked U.S. Steel to provide the number of blast furnace slips and any root cause evaluations performed for these events. U.S. Steel provided a summary of the total number of blast furnace relief valve openings for the years 2004 – 2006. These totals included both slips and intentional openings because of startup or shutdown. On a separate list, U.S. Steel provided the number of unplanned openings, not including planned startups and shutdowns. Both sets of data show that the number of openings can be large, up to 132 times per month.

Steel

On the steel-making side, Mr. Alexander informed EPA that the Hot Metal Desulfurization Station at the No. 1 BOP Shop was replaced in 1998/99. The station combines slag skimming and desulfurization. Emissions are controlled with a baghouse.

Slag skimming emissions are not controlled at the No. 2 Q-BOP Shop. They are vented through the roof monitors.

The CASbell/OB Lancing Stations M, D and E at the No. 2 Q-BOP Shop use a controlled argon stirring process and oxygen blowing for temperature and chemistry purposes. The station also now has a baghouse to control emissions. Uncaptured emissions are vented to a roof monitor.

Mr. Alexander further informed EPA personnel that installation of the Ladle Metallurgical Facilities at the No. 2 Q-BOP Shop was completed in the same period as the installation of the casters and degasser,

in the early 1990's. The casters are used to produce ingots. If a caster were to malfunction, production could be greatly decreased (did Alexander say this or are is this simply an observation by inspector?).

EPA asked Mr. Alexander about grain limits at the BOP Shop roof monitors. Mr. Alexander stated that there are no grain limits specified in U.S. Steel's Title V permit for the BOP Shops, and added that there are no grain limits at the Blast Furnace roof monitors either.

When asked about slag processing, Mr. Alexander informed EPA that IMS Division (Tube City IMS or IMS) (spell out IMS first) controls steel slag. Operations are located inside a building. Water sprays are positioned above the slag processing area.

EPA asked U.S. Steel about BOP Shop stack tests and malfunctions. Mr. Alexander said that there was a desulfurization baghouse malfunction on August 2, 2006 at the No. 2 Q-BOP Shop. Malfunction details are included in the semi-annual report spanning the period July 1 – December 31, 2006.

After the conversation with Mr. Alexander, Ms. Onyszko reviewed files at U.S. Steel for the remainder of the morning.

May 17, 2007

EPA arrived at U.S. Steel at approximately 9:00 A.M.

The group discussed a remediation project that was being performed on U.S. Steel property. The excavation of material was causing emission of benzene. U.S. Steel said it had been monitoring the concentrations of benzene in the atmosphere. The air permitting portion of the project includes several changes to the design and monitoring requirements. IDEM and U.S. Steel understood the project differently. IDEM said it would review the project in more detail and contact EPA with its findings.

Iron

EPA was informed that #6 blast furnace was down due to an outage.

Steel

Mr. Dauterman of U.S. Steel provided some general information about the BOP Shops prior to leaving for a tour.

May 18, 2007

EPA arrived at U.S. Steel at approximately 9:00 A.M.

Iron

EPA convened in a U.S. Steel conference room prior to certain individuals leaving for #6 and #8 blast furnace.

Steel

EPA convened in a U.S. Steel conference room prior to certain individuals leaving to observe visible

emissions at the No. 1 BOP Shop and No. 2 Q-BOP Shop.

Finishing Operations

Ms. Onyszko and Mr. Schaufelberger convened in a U.S. Steel conference room in the finishing operations area prior to taking a tour of the pickling facility. At the end of the day, EPA received stack tests reports for both the 84" and 80" Pickling Lines.

PLANT TOUR:

May 14, 2007

U.S. Steel personnel took EPA on a plant tour in which the group was driven to the major processes at the plant, including the coke oven batteries, sinter plant, blast furnaces, and BOP Shops.

While on the tour, Ms. Onyszko observed two bottle cars emitting orange smoke during interplant transfer. One incident occurred at about 1:45 P.M. and another at about 1:50 P.M. (if there is an opacity limit, did we take readings?)

May 15, 2007

Mr. Dickens observed two bottle cars smoking. Mr. Dickens was looking northeast toward the cars with the sun at approximately 190 degrees. The sky was clear and winds were zero to five miles per hour. (Sounds like Brian took readings, perhaps cite to it?)

Iron

Mr. Levanduski led Mr. Dickens and Ms. Onyszko on a tour of Blast furnace #14. There are four tap holes on the furnace. All have a local hood at the trough and over the iron spout. The group saw #3 hole being tapped. The group saw very little fugitive emissions from #3 hole. However, as tap hole #2 was being opened, apparently all of the collection capacity was directed to the #2 hole since there was no visible movement of air into #3's hood. The group also saw emissions from the cover over the dam at the end of #2 tap hole's trough. There was an opening on the cover. Mr. Levanduski said the operations personnel ~~will~~ inspects the level at the dam approximately every 15 minutes, and need the opening in the cover to do so. The group observed the south slag pit and noted no significant visible emissions.

Furnace #14 has a slag granulator, but it was not in operation during the tour. Mr. Dickens quickly walked past the south slag pit and did not observe significant particulate emissions.

Mr. Michael led the group through a tour of #8 blast furnace. #8 furnace casthouse is much older and rudimentary than #14. There is an enclosure around the bottle car at the casthouse, but emissions seemed to be emanating from the enclosure. The casthouse used flame suppression and flames were present at close spacing over the runners and trough. There was a large fan in the casthouse blowing across the trough and runners. When Mr. Dickens stood on the downwind side of the trough, the hydrogen sulfide odors were overpowering.

Mr. Michael explained that the water associated with the #8 blast furnace operates in a closed system. Water from the gas scrubber is sent to a clarifier where solids are removed. This same water is sprayed

onto the hot slag in the pit. As a result of this arrangement, U.S. Steel expects to emit CO from the clarifier and the amount of makeup water is the same as that lost as steam at the slag pits.

We observed #6 blast furnace slag pit. Because of the steam and poor weather conditions, we could not judge the particulate emissions. The slag pit had a large screen enclosure that was approximately 25 feet above the pit that covered the area above and around the slag spout. Mr. Michael said this screen was installed for safety reasons to prevent pieces of slag from exploding upwards when hot slag hits water pockets in the pit.

May 17, 2007

Iron

Tube City IMS handles slag from steel making (BOP Shop) operations. Mr. Rivas of IMS and Mr. Henry of U.S. Steel led Mr. Dickens on a tour of its operations, which has the purpose of recovering steel from the slag and then sizing and selling the slag. Steel slag is tapped into ladles at the BOP Shop and then carried by wheeled haulers to a building that formerly housed #4 open hearth furnace. The building remains, but has large openings in it for the ladle hauler and end loaders to enter and dump and remove slag. Mr. Dickens viewed the dumping of the ladle into the pit and noticed little fugitive emissions. At the end of the dump, however, the hauler bangs the ladle on a structure above the pit to dislodge any clinging material. This operation produced significant visible emissions for approximately 3 minutes that dispersed somewhat before exiting the building. At the end of the tour, Mr. Alexander provided examples of visible emission readings that were taken at the IMS operation. They showed very low opacity being emitted. Mr. Dickens speculated that the readings were taken as they exited the building. Mr. Dickens and Mr. Alexander had a discussion about whether the building around the IMS operation was intended to be a building and subject to a zero percent opacity limitation in the IAC 6.8 Fugitive Emission rules. Mr. Dickens stated that if ~~IMS and U.S. Steel considered~~ the IMS area is a building, then the zero percent opacity limit applies (even if IMS/USSTEEL doesn't consider it a building, it might be a building, right?). If the area was not a building, then reading should be performed on the operation itself, inside the area, and would be far higher than those taken as they left the area. (do you think it is a building? Does the regulation define what a building is? If you have enough info to determine it is building, then we should simply state it is a building b/c . . . . and therefore 0% opacity applies)

Mr. Henry and Mr. Dickens then met with Mr. Perkins of Levy Indiana Slag Company, which handles slag from the #4, #6, and #8 blast furnaces. These operations were miles away from the blast furnaces, but still on U.S. Steel property. Mr. Dickens observed a slag hauling truck, which transports the slag from the slag pits out to the Levy operations, dump its load of slag to the slag pile. The emissions were minimal.

Steel

Mr. Dauterman of U.S. Steel led Ms. Onyszko and Mr. Schaufelberger to the BOP Shops. No. 1 BOP Shop was visited first. On this day, only vessels M and D, the two end vessels, were operating. Mr. Dauterman stated that the refractory on vessel M was recently replaced.

At about 10:10 A.M. vessel M received a scrap charge. A charge ranges from 90 – 100 pounds. Tube City IMS provides scrap. A hot metal charge comes from a 180 – 200 ton ladle. Mr. Maborne, a U.S. Steel melter and operations desulfurization planner, spoke to EPA about No. 1 BOP Shop operations.

He led the group through the shop during the charging and blowing process.

At approximately 11:10 A.M., EPA and Mr. Dauterman went to the No. 2 Q-BOP Shop. Here the group was led by Mr. Wente. The group stood on a platform in the shop from which the desulfurization area and three vessels could be viewed. Mr. Wente explained that the desulfurization area was constructed at the same time as the No. 2 Q-BOP Shop was constructed, around 1974. At the time of the visit to the No. 2 Q-BOP Shop, the north desulfurization area was active. Orange smoke was visible during a pour, but it was captured by side vents. Smoke from the empty iron car and smoke from the desulfurization ladle after the lance was removed was blowing into the building, and not out of the No. 2 Q-BOP Shop door. Smoke was also visible during slag skimming. Vessel T was charged with scrap and hot metal. Smoke was evident during this process, but the majority appeared to be caught by the emission capture system.

May 18, 2007

Iron

Mr. Dickens met with Mr. Henry and headed to #8 blast furnace. As the two walked to #8 at approximately 09:56 A.M., the pair's personal CO monitors alarmed. Mr. Henry explained, and U.S. Steel operations personnel later confirmed, that the blast furnace gas collection flare flame had gone out and CO was being emitted into the area. The flare is supposed to have a flame present at all times to combust the CO. Mr. Henry said the Turboblower powerhouse records these flame outages. Because of high frequency of the flame outage, U.S. Steel was installing an auto-igniter at the tip of the flare to ensure a pilot is always present. The pair continued on to blast furnace #8 where they met Mr. Ramsey and Mr. Michael.

The group observed the blast furnace dust catcher dump its contents into a hauling truck. U.S. Steel uses a gate valve at the exit of the dust catcher and water sprays to reduce dust emissions. While the dump took place, Mr. Dickens observed very little fugitive dust.

Mr. Dickens and Mr. Henry then visited the #8 blast furnace slag pit. Mr. Dickens took visible emission readings at the pit. For some period of time while the readings were being taken, Levy was building the end dam on a pit row.

Mr. Dickens then took visible emission readings of the #6 blast furnace top. There were emissions and Mr. Henry speculated that they were caused by leaking bell valves that are used to charge the furnace with raw materials. U.S. Steel replaces the bell valves when the level of particulate emissions gets excessive. U.S. Steel performs periodic visible emission readings of the furnace tops so it can trend emissions.

Finally, Mr. Dickens and Mr. Henry drove to the sinter plant. Mr. Radovich of U.S. Steel explained the operations and its emission control. The emission vent stream from the strands is directed to a quench reactor where it contacts a water and lime mixture. The vent gas from the quench reactor then flows to a dry venturi where dry lime is injected. A baghouse collects the lime and the cleaned stream exits out of a stack to atmosphere. The cooler is covered and discharges through a stack. Mr. Dickens saw #1 and #3 lines running. There were no visible emissions from the discharge stacks, cooler stacks, or windbox stacks. Mr. Radovich said the plant was running normally.

Steel

Mr. Dauterman led Ms. Onyszko and Mr. Schaufelberger to the No. 1 BOP Shop and No. 2 Q-BOP Shop. Visible emission readings were performed at both shops in accordance with EPA Method 9, 40 C.F.R. Part 60, Appendix A. Readings were taken of the No. 1 BOP Shop roof monitors and scrubber stack from 9:45 A.M. to 10:28 A.M. During this time, Vessel D was being charged and tapped. Also, work was being performed on the scrubber. Visible emission readings were taken of the No. 2 Q-BOP Shop roof monitors from 11:00 A.M. to 11:36 A.M. During this time, Vessel W was being charged and tapped and Vessel Y was being charged. Visible Emission Observation Forms are included in the appendix of this report.

While observing opacity at the No. 1 BOP Shop, Ms. Onyszko also noticed that a torpedo car headed south on a track was emitting reddish smoke. The smoke was evident from approximately 10:00 – 10:04 A.M.

Finishing Operations

At approximately 1:00 P.M,. Ms. Onyszko and Mr. Schaufelberger met with Mr. Henry and Mr. Happer. Both U.S. Steel personnel work on environmental compliance issues for the pickling line scrubbers. In a conference room, U.S. Steel provided a pickling line overview. U.S. Steel also provided examples of Title V Air Compliance reports to EPA. The group took a brief tour of the 84" Pickling Line.

RECORDS REVIEW AND DISCUSSION:

Mr. Dickens reviewed the following records:

Correspondences pertaining to the soil remediation project that resulted in benzene emissions, called the CAMU project.

An information request from EPA to U.S. Steel pertaining to the Pulverized Coal Injection project, and U.S. Steel's response.

The permit application for #13 blast furnace reline, which resulted in the renaming to #14 blast furnace.

Third and fourth quarter 2006 and first quarter 2007 Title V quarterly reports. There were many violations reported.

Blast furnace relief valve opening records.

Ms. Onyszko reviewed the following records:

U.S. Steel Gary Works Environmental Incident Reports.

U.S. Steel's on-line records system that is available via U.S. Steel's intranet, including a variety of Title V report.